

ABSTRACT OF DISCLOSURE

A vital radio based automatic train control system that will interface seamlessly with existing onboard ATC equipment via existing track receiver inputs or directly. The invention provides a means of extending ATC signal territory with reduced equipment installation as compared to traditional cab or wayside based ATC. The invention can be used to reduce train braking distances and reduce headway. Furthermore, the radio cab signal can be used for additional purposes including but not limited to wayside equipment monitoring and rolling equipment monitoring.